

Claims

1. A machine tool, comprising
- a working area (7) with a work carrier (39, 40);
 - 5 - a tool-holder spindle (20, 21),
 - which replaceably accommodates a tool (26) that extends in a z direction, and
 - which is displaceable on an x-y plane;
 - and
 - 10 - a tool magazine (48),
 - which comprises an endless chain (51) that is circulatorily drivable and provided with tool-holding fixtures (56);

characterized

- in that** the tool magazine (48) is angular, having a substantially horizontal
- 15 top limb (61) and a bottom limb (57) which extends downwards;
- in that** the chain (51) extends substantially through both limbs (57, 61);
- and
- in that** a tool-fitting aperture (59) is provided in the bottom limb (57).

- 20 2. A machine tool according to claim 1, **characterized**
- in that** the tool magazine (48) comprises a magazine housing (50), in the bottom limb (57) of which a tool-fitting aperture (59) is formed.
3. A machine tool according to claim 2, **characterized**
- 25 **in that** the tool-fitting aperture (59) is provided with a movable cover (58).

4. A machine tool according to one of claims 1 to 3, **characterized**
- in that** it is a double-spindle machine tool.

5. A machine tool according to one of claims 1 to 4, **characterized in that** a tool-pick-up location (75, 76) is provided in the tool magazine (48).
- 5 6. A machine tool according to claim 5, **characterized in that** a tool-change arrangement (49) is provided between the tool-pick-up location (75, 76) and the tool-holder spindle (20, 21).
7. A machine tool according to claim 6, **characterized**
- 10 **in that** the tool-change arrangement (49) is a rotatable tool-change device (66, 67) which has two claws (69, 70) for holding a respective tool (26).
8. A machine tool according to claim 6 or 7, **characterized**
- 15 **in that** a transfer device (73, 74) is provided between the tool-pick-up location (75, 76) and the tool-change device (66, 67).
9. A machine tool according to one of claims 6 to 8, **characterized in that** the tool-change arrangement (49) is disposed above the tool-holding spindle (20, 21).
- 20 10. A machine tool according to one of claims 1 to 9, **characterized in that** the top limb (61) of the magazine housing (50) is provided with a closable tool-change opening (62).
- 25 11. A machine tool according to claim 10, **characterized in that** the tool-change opening (62) is closable by a roller shutter (63).